From: N2URO@aol.com@inetgw

To: Microsoft ATR

Date: 1/28/02 7:31am

Subject: Microsoft Settlement

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To whom it may concern:

The following comments are being submitted pursuant to the Tunney Act in response to the proposed settlement of The United States v. Microsoft, Inc.

Sincerely, Samuel Greenfeld

Personal Background:

I am an electrical engineer presently working for the United States Army. Due to outstanding security issues I will not comment further about my specific position. I have a bachelors degree in electrical & computer engineering and an masters degree in engineering with an electrical specialization. I am also a certified engineer-in-training in the state of New Jersey.

In the past I have performed computer consulting where I designed and managed entire Internet and Intranet systems. I have worked computers systems both reliant and not reliant on Microsoft products. In the process I have done limited integration and seen the interactions of Microsoft products with those from other firms. My comments come from the perspective of an end-user, programmer and systems administrator.

The enclosed comments are to be taken as my personal comments; they are NOT necessarily the official views of the U.S. Army, the U.S. Government, nor any portion of either organization thereof. Any questions about my comments should be directed to the email address from which this message was sent.

General Information:

Microsoft's products have become de-facto standards in the United States' computer market. Approximately 90% of all computers presently in use today are estimated to be using a Microsoft operating system. The next-nearest competitor is believed to be Apple computer, with a market share of approximately 5%.

The lack of a significant competitor has discouraged manufacturers of other devices from supporting other operating systems. Many hardware items now are designed primarily for use with Microsoft-running computers. "Winmodems" and "Winprinters", found in almost any computer store, are so named because they and their software drivers rely on features found in Microsoft Windows products. Winmodems themselves have become so popular due to their low cost that many computer manufacturers no longer supply full-featured modems; the term itself can be found the packages of many modems in computer stores.[1]

In the software world, products that do support non-Microsoft operating system (OS) platforms tend to charge more for versions that do not run on a Microsoft OS. This is largely due to economies of scale since Microsoft's operating systems dominate the market. Except for certain specialized applications, the high price of programs for non-Microsoft operating systems tends to turn off cost-conscious companies from purchasing non-Microsoft operating systems and their programs in the first place.

In addition, software and hardware companies often refuse to support efforts to use their hardware and/or software on other platforms due to the support headaches and expenses this causes. This causes problems for projects like SANE [2], which attempts to allow users of Linux (one alternative operating system), to use photographic scanners on other platforms.

[1] An example of a winmodem can be found at http://www.usr.com/products/home/home-product.asp?sku=3CP5699A . Note the

description states that the item is "designed exclusively for the Windows operating system."
[2] The SANE Project Internet homepage: http://www.mostang.com/sane/

Shortfalls of the current proposal / Proposed additional remedies:

The court, having recognized that Microsoft's operating system lead has effected competitors, has proposed opening up many of Microsoft's programming interfaces, protocols and related to third parties.

While I agree with the court's intent, I personally believe the current settlement fails to address the needs of several parties. Please find the additional items I wish to be addressed lettered below:

A. The current proposal fails to provide a competitive market for third-party replacements of Microsoft middleware and operating systems: The settlement as currently written requires Microsoft to generate information about its protocols and upcoming interfaces in the beta stage of projects[3]. This is a phase too late for many firms to match Microsoft's development, and will result almost always in Microsoft being first to market.

An example of a software project already continuously caught lagging behind Microsoft's protocol changes is the Samba project [4]. This project attempts to create an alternative client and server for Microsoft's SMB Networking protocol. Given a lack of documentation and constant tweaks, quirks, and other issues, they constantly find themselves at least a year behind Microsoft's current network server protocol revisions.

In order for there to be a level playing field for Microsoft, Samba, and other developers (regardless of area), protocols and APIs, however tentative, must be made available within sixty (60) days of Microsoft's development of them at least for the first five (5) years of the settlement. Without such a provision, companies will be unable to match Microsoft's market offerings in a timely manner, and hence many often fail to produce timely competing products.

B. The current settlement fails to address the needs of independent, typically non-commercial and/or "free" software developers: The Samba project, mentioned above, has no real "home-base" organization that can sign contracts on its behalf, nor could be considered a "business" by any stretch of the imagination.

While a skilled engineer might be able to build or repair a record player or cassette deck, building a home-brew CD or DVD player is almost out of the question. Hence, many hobbyists have turned to software development. The number of hobbyist-designed programs on the market today is significant; they range from paint programs to office suites to independent operating systems with their own supporting middleware.

Many companies employ the people working on products such as Samba could sign these contracts on their employee's behalf. But there is no single business that could sign the necessary paperwork to make an alternative version. Non-disclosure agreements may also be problematic, as many freely available programs make their source code available for others to modify to their unique requirements.

Since independent and home developers often like to make products that compete with Microsoft's products, the settlement must be modified so any party, regardless of business, educational, or other status, can acquire information on Microsoft's APIs. Such terms should allow the resulting end products in the vast majority of cases to exist in source code form.

C. The current proposed settlement fails to include a user education segment.

Few users change or remove the default programs that Microsoft and/or the OEM that built a computer provide. A joint-industry effort must be made to educate consumers to ensure they understand they have alternatives, even if said alternatives cost money over what they paid for software to be included with a computer.

D. The current settlement proposal fails to provide a means to identify the party most likely at fault due to a user's problem. When software and/or hardware products interfere with one other, the makers of the products involved may span several companies. Such companies, as those familiar with attempting to get technical support are aware, tend to blame each other.

There must be a clear registry or other source that a user can see that tells them whose product is performing can perform function on their computer. The registry must state at the very least the manufacturer of said item, the installer of said item and a technical support contact and means (phone, email, etc.). This registry must also note if several products are capable of performing said function; these programs may interfere with each other as well.

All "well-behaved" programs made after this registry program is incorporated into Microsoft's operating systems (and made available for older ones as a retrofit) should use this registry. That way both users and technical support personnel are aware as to what performs what task on a user's system.

- [3] Reference Section III.D of the Competitive Impact Statement.
- [4] http://www.samba.org